



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,746	12/05/2003	Jayalekshmy Ayycr	0640/71701/JPW/AG	3165
7590		07/25/2007		
John P. White Cooper & Dunham LLP 1185 Avenue of the Americas New York, NY 10036			EXAMINER NGUYEN, CAM N	
			ART UNIT 1754	PAPER NUMBER
			MAIL DATE 07/25/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/729,746

Applicant(s)

AYYER ET AL.

Examiner

Cam N. Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/02/07 (an election).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 18-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Response to Election/Restriction

1. Applicant's election of Group I, claims 1-17 & 38 in the reply filed on 5/02/07 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 18-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention(s), there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 5/02/07.

### Claim Objections

3. Claims 1-5, 7-8, 10, & 11 are objected to because of the following informalities:
- A. In claim 1, line 2, "the said catalyst" should be changed to --said catalyst--.
  - B. In claim 1, line 3, "and" should be deleted and replaced thereof with -- , --.
  - C. In claim 1, line 3, -- , -- should be inserted after "alumina".
  - D. In claim 2, line 2, "gypsum and ....alumina and ....hydrated iron oxide" should be changed to --gypsum, ...alumina, and ...hydrated iron oxide--.
  - E. In claim 3, line 1, "clays are selected form the group comprising..." should be changed to --said clay is selected from the group consisting of....--.
  - F. In claim 4, line 1, "clays are" should be changed to --said clay is--.

Art Unit: 1754

- G. In claim 5, "clay used" should be changed to --said clay--.
- H. In claim 7, line 1, -- a -- should be inserted before "pH".
- I. In claim 8, line 1-2, "temperature" should be changed to --a temperature--.
- J. In claim 8, line 2, "before use for activating the same" should be deleted.
- K. In claim 10, line 2, "the same" is suggested spelled out.
- L. In claim 11, line 2, "the same" is suggested spelled out.

Appropriate correction is required.

**Claim Rejections - 35 USC § 112 (Second Paragraph)**

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 5. Claims 10 & 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. Claim 10 recites the limitation "said spent catalyst" in line 1. There is insufficient antecedent basis for this limitation in the claim.

B. Regarding claim 38, the claim is called for "a catalyst", but there is no limitation in the claim describing the catalyst. It should be noted that the composition, structure, and properties of the catalyst should be set forth in the catalyst claim itself.

**Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-17, & 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider et al., "hereinafter Schneider '213", (US Pat. 4,774,213).

Schneider '213 discloses the claimed catalyst containing iron compound in combination with acid aluminosilicate, which is clay (see col. 8, claim 1, and other claims in the claim section of the reference).

While Schneider '213 is silent with respect to the concentrations of the iron and clay, it would appear that the minimum concentrations for these components being required in the instant claim 1 would obviously met by the teaching of the reference.

Regarding claims 8-17, it would appear that the limitations in these claims are intended use limitations. The instant claims are called for "a catalyst" and that catalyst being claimed does not depend on the intended use recitations for completeness, but the catalyst limitations are able to stand alone. See MPEP 2111.02 and 2114. See also *In re Pearson*, 181 USPQ 641 & *In re Thrau*, 57 USPQ 324.

**Allowable Subject Matter**

8. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Citations**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form attached.

**Conclusion**

10. Claims 1-38 are pending. Claims 1, 3-17 & 38 are rejected. Claim 1-5, 7-8, 10, & 11 are objected. Claims 18-37 remain withdrawn due to nonelected (distinct) invention(s). No claims are allowed.

**Contacts**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M-F, 9:00 AM - 6:30 PM, at alternative work site.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Art Unit: 1754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cam N. Nguyen/

Nguyen/cnn

Primary Examiner

July 23, 2007

Art Unit: 1754